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ABSTRACT: A system for dynamically pricing media content is operatively coupled to one or more clients over a network. The system dynamically adjusts pricing of the media content and delivers the media content to the clients that order the media content at a dynamically adjusted price . The price can be dynamically adjusted based on profit optimization. Alternatively or additionally, the price can be adjusted based to time between purchases. Further, the system is capable of rewarding institutions for allowing their members to access the system.

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Abstract Paragraph - ABTX (1): A system for dynamically pricing media content is operatively coupled to one or more clients over a network. The system dynamically adjusts pricing of the media content and delivers the media content to the clients that order the media content at a dynamically adjusted price . The price can be dynamically adjusted based on profit optimization. Alternatively or additionally, the price can be adjusted based to time between purchases. Further, the system is capable of rewarding institutions for allowing their members to access the system.

Summary of Invention Paragraph - BSTX (10): [0009] In a further form, a system includes memory containing at least one item and a processor operatively coupled to the memory. The processor is responsive to input over a network from one or more clients. The processor is operable to dynamically adjust pricing of the item and to deliver the item from memory to the clients that order the item at a dynamically adjusted price .

Brief Description of Drawings Paragraph - DRTX (15): [0026] FIG. 14 shows a purchase history display screen for the dynamic pricing system.

Brief Description of Drawings Paragraph - DRTX (25): [0036] FIG. 24A shows a purchase content display screen for the dynamic pricing system.

Detail Description Paragraph - DETX (4): [0050] The dynamic pricing system 102 stores, dynamically prices, and delivers media content items to the clients 108 over the network 106. The dynamic pricing system 102 is also operable to receive media content from the clients 108. This media content can include, but is not limited to, music, books, movies, videos, television shows, software, coupons, tickets, web pages, magazines, newspapers, and other type of electronic media. As should be appreciated from the discussion below, the dynamic pricing system 102 can be adapted to dynamically price goods and/or services, such as electronics and repair services. For instance, these goods and/or service items can include, but are not limited to, compact discs, digital versatile discs, electronic products, household products, jewelry, furniture, telephone services, and the like. It should be appreciated that such items, when purchased, can be delivered electronically over the network 106 and/or physically delivered, for example by a postal carrier. As illustrated, the dynamic pricing system 102 includes a processor 110, a clock 111 and memory 112. The dynamic pricing system 102 can be located on a single server or distributed over several servers. In one embodiment, the dynamic pricing system 102 is incorporated into one or more web servers. The processor 110 is used to control the operation of the dynamic pricing system 102. The processor 110 may be comprised of one or more components. For a multi component form of processor 110, one or more components may be located remotely relative to the others, or configured as a single unit. Furthermore, processor 110 can be embodied in a form having more than one processing unit, such as a multi-processor configuration, and should be understood to collectively refer to such configurations as well as a single-processor-based arrangement. One or more components of the processor 110 may be of electronic variety defining digital circuitry, analog circuitry, or both. Processor 110 can be of a programmable variety responsive to software instructions, a hardwired state machine, or a combination of these. The clock 111 is used to time events in the dynamic pricing system 102. As should be appreciated, the clock 111 can be incorporated into the processor 110 or can be a stand-alone component. Further, the clock 111 can be hardware and/or software based. Among its many functions, the memory 112 in conjunction with the processor 110 is used to store media content and manage sales. Memory 112 can include one or more types of solid state memory, magnetic memory, or optical memory, just to name a few. By way of nonlimiting example, the memory 112 can include solid state electronic random access memory (RAM), sequential access memory (SAM), such as first-in, first-out (FIFO) variety or last-in, first-out (LIFO) variety, programmable read only memory (PROM), electronically programmable read only memory (EPROM), or electronically erasable programmable read only memory (EEPROM); an optical disc memory (such as a DVD or CD-ROM); a magnetically encoded hard disc, floppy disc, tape, or cartridge media; or a combination of these memory types. In addition, the memory 114 may be volatile, non-volatile, or a hybrid combination of volatile, non-volatile varieties. In the illustrated embodiment, the memory 112 further includes removable memory 114. The removable memory 114 can be in the form of a non-volatile electronic memory unit, optical memory disk (such as a DVD or CD ROM); a magnetically encoded hard disk, floppy disk, tape, or cartridge media; or a combination of these or other removable memory types.

Detail Description Paragraph - DETX (5): [0051] Network 106 can include the Internet, one or

more other wide area networks (WAN), a local area network (LAN), a proprietary network such as provided by America Online, Inc., an institutional network, a cable television network, a public switched telephone network (PSTN), a combination of these, and/or other types of networks generally known to those skilled in the art. In one form of the present invention, the network 106 includes the Internet. In the illustrated embodiment, the network 106 further includes an institutional network 115. As should be appreciated that the network 106 can include more than one institutional network 115. The institutional network 115 is maintained by institutions, such as colleges, universities, high schools, technical schools, other types of learning institutions, and/or charitable organizations. As shown, client devices 108 are operatively coupled to the network 106. Users access the dynamic pricing system 102 through the client devices 108. The clients 108 and the dynamic pricing system 102 communicate with one another by sending signals across the network 106. In one form, these signals can include HyperText Mark Up Language (HTML) pages, Extensible Mark Up Language (XML) Page, and other types transmission protocols. For example, the dynamic pricing system 102 can send a signal corresponding to a web page form across the network 106 to the client 108. The user with client 108 can fill out the form and send a signal corresponding to the filled-out form across the network 106 to the dynamic pricing system 102. By way of non-limiting examples, the clients 108 can include personal computers, both fixed and portable; computer terminals; PDA's; cellular telephones, land line based telephones and the like; television systems, such as televisions, television-based web browsers, digital video recorders, analog video recorders, cable boxes, cable modems, direct broadcast satellite (DBS) boxes, digital versatile disc (DVD) players and video game systems; home entertainment systems, such as stereo equipment, MP3 players, and the like; sound production equipment; video/movie production equipment; or a combination these components, to name a few examples. As shown, the clients 108 are operatively coupled to the dynamic pricing system 102 over the network 106. It should be appreciated that the clients 108 can be operatively coupled to the dynamic pricing system 102 through hardwired and/or wireless connections. The clients 108 are hardwired and/or have software that allows the clients 108 to communicate over the network 106. In one embodiment, the clients 108 are personal computers with software that can include email applications, web browsers, chat programs, and/or proprietary software.

Detail Description Paragraph - DETX (6): [0052] Users of the dynamic pricing system 102 can be further categorized into two types of users, mainly: content suppliers (or artists) and content consumers (or customers). For example, content suppliers can include, but are not limited to, artists, authors, directors, programmers, producers, actors, performers, publishers, movie/television studios, music labels, copyright holding organizations such as the Recording Industry Association of America (RIAA), and their agents. As should be appreciated, the same user of the dynamic pricing system 102 can be a combination of both types, such that they can take the role of being both a content supplier and consumer. As shown, the clients 108 can include one or more content supplier computers/devices 116. The content supplier computer 116 can include, but is not limited to, any of the devices that were described above for the clients 108. With content supplier computer 116, a content supplier can post media content for sale on the dynamic pricing system 102. The media content can come from a source outside of computer 116, or an artist can generate the content with the content supplier computer 116 and/or peripheral devices 118 that operatively coupled to the content supplier computer 116. These peripheral devices 118 can

include, but are not limited to, electronic keyboards, digital cameras, scanners, video cameras, video production equipment, sound production equipment, PDA's, portable computers, and other types of content producing equipment. For example, in the illustrated embodiment, the artist can use a camera 120 to create still photographs, movies and videos. Further, in the illustrated embodiment, the artist can create music with keyboard 122 and can create software or text with the content supplier computer 116. Although a single content supplier computer 116 is illustrated in FIG. 1, it should be appreciated that system 100 can include multiple content supplier computers 116. Content suppliers can sell individual items and/or bundle multiple items for sale on the dynamic pricing system 102. For example, the dynamic pricing system 102 can sell one song and two pictures collectively for a single price. In another example, two pictures can be bundled together and sold at a single price on the dynamic pricing system 102.

Detail Description Paragraph - DETX (7): [0053] The clients 108 further include customer devices 124. It should be understood that customer devices 124 can include, but are limited to, the devices as described above for the clients 108. As shown, the customer devices 124 can further include institutional member devices 125. Institutional members, such as students and teachers, are operatively coupled to the dynamic pricing system 102 through the institutional network 115. With customer devices 124, consumers can purchase and download content from the dynamic pricing system 102. Consumers can view, listen to and/or interact with the content they purchased with customer devices 124. For example, when the customer device 124 is a personal computer, the personal computer can be used to store compressed digital media musical content, such as MP3 files. The personal computer then can be used to play, store, and/or "burn" CDs with music from the MP3 files. In the illustrated embodiment, a consumer can download a book with customer device 124 and print out the book with a printer 125 that is operatively coupled to the customer device 124. Alternatively or additionally, the consumer can download the purchased content to one or more portable devices 126. These portable devices 126 can include, but are not limited to, portable music players (such as MP3 players), PDA's, cellular telephones, portable televisions, portable computers, hand held games, e-book readers and/or a combination of these devices. As shown, the portable devices 126 can be operatively to the customer devices 124 in order to download the purchased content. The portable devices 126 can also be operatively coupled to the network 106 through a wireless network connection. For example, a portable music player 128, such as an MP3 player, can download purchased songs from the customer device 124. It should be understood that dynamic pricing system 102 is not limited to a specific file format, such as the MP3 format for music. Rather, the dynamic pricing system 102 is able to accommodate a wide range of file formats such as WAV and SDMI complaint files for musical works and ASCII and portable document format (PDF) files for text, for example. In the illustrated embodiment, a consumer with customer device 124 can download a purchased book, software program, song, and/or movie to a PDA 130. Moreover, the portable devices 126 can be operatively coupled to the network 106 in order to directly purchase and receive content from the dynamic pricing system 102. As illustrated, a wireless PDA or cellular telephone 132 can purchase and download content directly from the dynamic pricing system 102. In another example illustrated in FIG. 1, a customer can purchase dynamically priced movies or television shows with a television 134. In this example, the customer purchases the program from the dynamic pricing system 102 through the Internet, a cable system and/or a direct broadcast satellite (DBS) system (network 106). Payments

for content purchased on the dynamic pricing system 102 can be handled internally and/or handled by a third party system. In one embodiment, a third party payment service 136 is used process customer payments for downloaded content. In one form, the third party payment system 136 includes Verisign's PayFlow system.

Detail Description Paragraph - DETX (8): [0054] A detailed illustration of one of many embodiments of the dynamic pricing system 102 is illustrated in FIG. 2. As shown, system 200 includes the dynamic pricing system 102 and one or more clients 108. Although not illustrated in FIG. 2, the client computer 108 in the FIG. 2 embodiment is operatively coupled to the dynamic pricing system 108 through the network 106 in the same manner as illustrated in FIG. 1. In one form, the network 106 for the FIG. 2 dynamic pricing system 102 includes the Internet . The dynamic pricing system 102 in the FIG. 2 embodiment includes one or more connection servers 202, one or more navigation servers 204, one or more heartbeat (load balancing) servers 206, one or more database servers 208, one or more file servers 210, one or more master database servers 212, and one or more master file servers 214. Although servers 202, 204, 206, 208, 210, 212 and 214 are illustrated as separate units, it should be understood that selected servers or all of the servers can be combined to form a single unit. In one form, the dynamic pricing system 102 utilizes the Linux operating system with programs coded in the JAVA language. As should be appreciated, the dynamic pricing system can use other operating systems, such as UNIX, Windows and Apple Macintosh operating systems, to name a few. Further, the software in the dynamic pricing system 102 can be programmed in other languages besides JAVA, such as C++, Visual Basic, Fortran, Pascal, CGI and PERL, to name a few.

Detail Description Paragraph - DETX (9): [0055] As illustrated, the heartbeat server 206 is operatively coupled to the connection server 202, the navigation servers 204, the database servers 208, and the file servers 210 in order to monitor their load. The connection server 202 is operatively coupled to the navigation servers 204. The navigation servers 204, the database servers 208 and file servers 210 are operatively coupled to with one another. The heartbeat server 206 monitors the performance of the other servers and load balances the dynamic pricing system 102. Periodically, servers 202, 204, 208 and 210 individually send their load status information to the heartbeat server 206. With the collected status information, the heartbeat server 206 is able to load balance servers 202, 204, 208 and 210. If the heartbeat server 206 does not receive a status signal from one of the servers 202, 204, 208 or 210, the heartbeat server 206 concludes that the server is offline, or otherwise unavailable, and directs the requests to the remaining servers. For example, when one of the database servers 208 goes offline, the heartbeat server 206 can route requests to the remaining database servers 208. Each server receives load information about the other servers from the heartbeat server 206. Based on this load information, a server can send processing requests to a server with the lowest load in order to improve the operational efficiency of the dynamic pricing system 102.

Detail Description Paragraph - DETX (22): [0068] A technique for dynamically pricing and providing content, according to one embodiment of the present invention, is illustrated with flow diagram 400 in FIG. 4. In stage 402, the customer with customer device 124 registers with the dynamic pricing system 102. Alternatively, if the customer has already registered with the

dynamic pricing system 102, the customer can directly login to the dynamic pricing system 102. In one form, the client 108 has proprietary client software for interacting with the dynamic pricing system 102. In another form of the present invention, which is described below, the client 108 includes a web browser for interacting with the dynamic pricing system 102. The web browser allows the customer and/or artist to view web pages from the dynamic pricing system 102 and to submit forms to the dynamic pricing system 102. As should be appreciated, the customer first accesses the dynamic pricing system 102 by entering and/or selecting the domain name or the IP address of the dynamic pricing system 102 with the web browser. After accessing the dynamic pricing system, one of the navigation servers 204 sends a main web page to the client 108.

Detail Description Paragraph - DETX (23): [0069] An example of a main web page 500 is illustrated in FIG. 5. It should be appreciated that the web pages described below can omit certain information and/or include information. Furthermore, although the interface describe below uses web pages, it should be appreciated that other types interfaces can be used to interact with users of the dynamic pricing system 102. For instance, a proprietary interface, a menu type interface, a voice command interface, and/or other types of interfaces as generally known by those skilled in the art can also be used. Page 500 includes a navigation toolbar 502, an advertisement portion 504, a general information portion 506, a new user button 508, a login portion 510, an account information portion 511, and a search portion 512. With the navigation toolbar 502, the user can navigate between the various web pages of the dynamic pricing system 102. As illustrated, the navigation tool bar 502 includes a welcome button 514, a new user account button 516, an account button 518, a sign in button 520, an artist registration button 522, a frequently asked question (FAQ) button 524, a view media button 526, a music button 528, a video button 530, a photograph button 532, a book button 534, a programs button 536, an advanced search button 538 and an about button 540. Selecting the welcome button 514 causes the main web page 500 to appear on the client 108. As shown in FIG. 5, page pointer 541 is positioned next to the welcome button 514 so as to indicate that the user is currently on the main web page 500. The user of the dynamic pricing system can create a new user account by selecting either the new user account button 516 or the new account button 508, and can edit their account information by selecting the account button 518. The sign in button 520 allows the user to sign into the dynamic pricing system 102. With the artist registration button 522, a content supplier, such as an artist, can register with and/or receive information on how to register as a content supplier on the dynamic pricing system 102. A user can receive answers to questions by selecting the FAQ button 524. A customer can select the view media button 526 in order to view the different categories of media content (music, movies, etc.) that are available on the dynamic pricing system 102. Alternatively, the user can directly access the music, videos/movies, photographs, text/book and software category screens, which list the content available, by selecting the music button 528, the video button 530, the photograph button 532, the book button 534 and the program button 536, respectively. The user can search for content on the dynamic pricing system 102 by selecting the advanced search button 538, and the user can retrieve general information about the dynamic pricing system, such as contact information, by selecting the about button 540.

Detail Description Paragraph - DETX (26): [0072] After logging into the dynamic pricing system 102, the user is shown a registered user main page 1000, which is depicted in FIG. 10. As shown,

the registered user main page 1000 contains similar portions and buttons as shown in the main page 500 of FIG. 5, with the exception that the registered user main page 1000 does not have the login portion 510 and the account information portion 511 lists the particular account information of the current user. In the illustrated embodiment, the account information portion 511 includes a usemame identifier 1002, which identifies the current user, and an account balance 1004, which indicates the amount of money the current user has in their the dynamic pricing system account.

Detail Description Paragraph - DETX (27): [0073] Initially, when the user registers with the dynamic pricing system 102 their account balance 1004, which is stored in field 390 of the account table 312, is zero-dollars ($0.00). Although dollars are used when describing the account balance 1004 of the user in one embodiment, it should be appreciated that different currencies can be used in the account balance 1004, such as the Euro and the yen. With a zero ($0.00) account balance 1004, the user can still use the dynamic pricing system 102. For example, an artist does not need money in order to supply content to the dynamic pricing system 102. In another example, even with a zero account balance, a customer can download free content from the dynamic pricing system 102. In the illustrated embodiment, a customer pre-deposits money into an account from which their purchases are deducted. By pre-depositing money into an account, purchases on system 102 occur quickly and the purchasing experience for the user is similar to the "free" systems, such as the Gnutella. The customer can add money to their account in a number of ways including, but not limited to: payments through credit or debit cards; wire transfers; being billed; sending cash, checks or money orders to administrator of the dynamic pricing system 102; and/or transacting payments through the third party payment service 136, such as Verisign's PayFlow system or PayPal.com's system, to name a few. In another embodiment, a customer does not maintain an account balance, but rather pays for each individual purchase at the time of the purchase.

Detail Description Paragraph - DETX (28): [0074] A flow diagram 1100 for illustrating one technique for adding money to an account in the dynamic pricing system 102 according to one embodiment of the present invention is shown in FIG. 11. In stage 1102, the dynamic pricing system 102 sends to the client 108 one or more forms for crediting the account of the customer. To add money, the customer selects the my account button 518 on the navigation tool bar 502. In response, the dynamic pricing system 102 sends to the client 108 a billing form 1200 (FIG. 12). Form 1200 includes a my account tool bar 1202 and an add new card button 1204. The my account tool bar 1202 allows the user to navigate through a number of forms related to their account. The my account tool bar 1202 includes a profile form link 1206, a purchases form link 1208, and a billing form link 1210. With the profile link form 1206, the user can edit their account profile information. As illustrated in FIG. 13, the account profile form 1300 contains many of the fields shown in form 600 (FIG. 6) for entering user information, including fields 610, 612, 614, 616, 618, 620, 622, 624 and 626. The account profile form 1300 further includes the my account tool bar 1202, a save button 1302 for saving any changes to the user database 236 and a cancel button 1304 for not saving the changes. With the purchases form link 1208, the user can view their past purchases on purchase history form 1400 (FIG. 14). The purchase history form 1400 includes a list 1402 of past purchases. This list 1402 can include date of purchase 1404, title of content 1406 and price paid for the content 1408.

Detail Description Paragraph - DETX (31): [0077] In stage 1104 (FIG. 11), the dynamic pricing system 102 receives the credit card billing information from the client 108, and in stage 1106, the dynamic pricing system 102 through the third party client software forwards the billing information to the third party payment system 136, which administers the transaction. The third party payment system 136 collects the transaction information from the dynamic pricing system 102 and then securely routes the transaction via a gateway through a financial network to the appropriate bank, ensuring that user is authorized to make the purchase. The third party client software in the dynamic pricing system 102 also sends an acknowledgement back to the third party payment service 136 after returning the payment results to the dynamic pricing system 102, in order to protect the user against double billing due to latency or broken communication sessions. It should be understood that the dynamic pricing system 102 can send an error message to the client 108, when the dynamic pricing system cannot charge the credit card (i.e., not authorized to charge the credit card or insufficient funds on the card). When the transaction is authorized, the dynamic pricing system 102 in stage 1108 updates the account balance information stored in the user database 236 by adding the amount from the charge field 1524 to the account balance field 390 of table 312 (FIG. 3). On the third party payment system 136, the funds for the transaction are transferred to an account for the dynamic pricing system 102. In another embodiment, the dynamic pricing system 102 directly processes the transaction without using the third party payment system 136.

Detail Description Paragraph - DETX (33): [0079] An example of a search results page 1700 is illustrated in FIG. 17. As illustrated, the search results page 1700 includes a modify search portion 1702 and a results portion 1704. With the modify search portion 1702, the user can submit another search to the dynamic pricing system 102. Portion 1702 has a search term field 1706 in which search terms are entered, a media type drop down list 1708 in which the type of media to be searched is entered, and a search button 1710 for submitting the search. The results portion 1704 of the search results page 1700 displays the results from the submitted search. Each row/record 1712 of the results portion 1704 contains information about an item, in this example a book, that matched the search criteria. As shown, each record 1704 in the results portion 1704 can display an image 1714, a title 1716, author 1718, file size 1720, and length 1722 of the work. In the illustrated example, image 1714 contains a image of the cover of the book, and length 1722 lists the number of pages the book contains. The results portion 1704 further contains a title header 1724 that allows the user to sort the records 1712 by title when selected and an author header 1726 that allows the user to sort the records 1712 by author when selected. The user can view additional details about the work by selecting a details link 1728 for the record 1712, and the user can preview the work by selecting a preview link 1730 for the record 1712. The content listed in the record 1720 can be bought by selecting buy link 1732. As shown, buy link 1732 lists a current dynamic price of the content. By selecting link 1732, the user can purchase and download the work.

Detail Description Paragraph - DETX (35): [0081] For example, when either the music page link 1802 or the music button 528 is selected, the client 108 displays music page 1900. As shown in FIG. 19, the music page 1900 includes links 1902 that are organized by musical genre, such as "jazz", "funk" and "rock", to name a few. Selecting one of the links 1902 will cause the client 108

to display a page organized specifically for the selected musical genre. For instance, if jazz link 1904 is selected, the dynamic pricing system 102 will query the music databases 230 in order to generate a genre page 2000 on the client 108. In FIG. 20, the genre page 2000 contains musical artist links 2002 that allow the user to browse the musical works that are available for sale from the listed artists. When one of the musical artist links 2002 is selected, the dynamic pricing system 102 sends to the client 108 a musical artist page 2100, which is shown in FIG. 21. In the illustrated embodiment, the artist page 2100 contains a name 2102 of the artist and album links 2104 that list the albums available from that artist. When the customer selects one of the album links 2104, the client 108 displays to the customer an album page 2200 (FIG. 22) that includes album (or CD) name 2202 and song links 2204 for songs on that album.

Detail Description Paragraph - DETX (37): [0083] To receive a dynamic price for the content listed in the details page 2300, the customer selects buy link 2320. In the illustrated embodiment, the customer receives a dynamic price for the song by selecting buy link 2320, which sends a signal to the dynamic pricing system 102 that indicates that the customer wants the current dynamic price for the song. In response to receipt of this signal, the dynamic pricing system 102 in stage 406 (FIG. 4) supplies a dynamic price for the song and generates a purchase window 2400 on the client 108 that lists the current, dynamic price for the song. Purchase window 2400 is also generated when the user selects the buy link 1732 in the search results page 1700 (FIG. 17). As illustrated in FIG. 24A, the purchase window 2400 includes a message portion 2402 with a dynamic price 2404 for the song, a purchase button 2406 in order to purchase the song, and a cancel button 2408 to not purchase the song. In the illustrated embodiment, the customer is given a specified time window to purchase the song. After the period elapses, the purchase window 2400 automatically closes. The purchase window 2400 can also be closed by selecting the cancel button 2408. In another embodiment, the dynamic pricing system 102 periodically refreshes the price 2404 in the purchase window 2400. The price 2404 for a particular item, such as the song shown, and/or for a group of items is generated and dynamically adjusted by server 102. In one embodiment, the price is adjusted based on demand for the item so as to maximize profit. Generally, the greater demand for the particular item, server 102 will increase the price until the profit is maximized, and when the demand for the item is lower, the dynamic pricing system 102 lowers the price until the profit is maximized. The price of a song can also be dynamically adjusted based on other factors such as the amount of transfer time, the length of the song and overall quality of the song, to name a few factors. When the purchase button 2406 is selected, the dynamic pricing system 102 deducts the purchase price 2404 from the account of the user (see field 390) and the purchased item is transferred from the dynamic pricing system 102 to the customer device 124 over the network 106. When the user does not have enough money in their account, the dynamic pricing system 102 requests the user to deposit additional funds into their account before downloading the item. In one embodiment, the hypertext transfer protocol (HTTP) is used to download the item from the dynamic pricing system 102. In another embodiment, the file transfer protocol (FTP) is used to download the item from the dynamic pricing system 102 to the client 108. As should be appreciated, items can be downloaded in other manners and using other types of protocols. For example, in the above-described P2P embodiment of the dynamic pricing system 102, the purchased item is transferred over the network 106 directly from the content supplier computer 116 to the customer device 124. During downloading, screen 2400 is

changed to downloading screen 2400a (FIG. 24B), which indicates the download status of the item. Screen 2400a contains a message portion 2452 that displays the status of the download and a close button 2454 for closing screen 2400a. After the item is successfully downloaded, message 2452 indicates that the download process is complete. If the download is unsuccessful, message 2452 indicates that the download was not completed, and the dynamic pricing system 102 gives the customer a certain amount of time, such as two days, from the purchase to download the item without being charged again for the item.

Detail Description Paragraph - DETX (38): [0084] As should be appreciated, customers can access and purchase items on the dynamic pricing system 102 using other types of interfaces. For example, when the client 108 is a telephone, the customer can access and purchase items on the dynamic pricing system 102 through an automated voice menu system (i.e., "The prices is 33 cents. You have 1 minute to press 1 to confirm your order or press 0 to cancel."). When for example customers use portable devices 126, a wireless protocol, such as Wireless Application Protocol (WAP), can be used to interface with system 102.

Detail Description Paragraph - DETX (39): [0085] Below a number of techniques for dynamically pricing items on the dynamic pricing system 102 will be described. The dynamic pricing system 102 tries to optimize profit; this typically involves some estimation of the demand curve(s) for the items. The dynamic pricing system 102 in dynamically pricing the media content actually never knows the demand curve for an item for sale. Generally, the dynamic pricing system 102 continues to raise the price for an item until total profits are reduced. Alternatively, system 102 will decrease the price of content whenever an increase in price reduces profits. A general description of one embodiment of the pricing algorithm will now be described below. In this embodiment, the dynamic pricing system 102 through processor 1 10 calculates price adjustments using a logarithmic demand curve that has been found in empirical econometric studies to be the best fitting of algebraically tractable functional form for many retail markets. The quantity of a particular item (q) purchased at a particular price (p) is assumed to take the form of equation 1 below:

Detail Description Paragraph - DETX (46): [0091] With Equation 1 above, parameters .alpha. and .beta. are unknown. In order to solve these parameters, the technique according to the present invention uses data observed through sales of items to estimate these parameters. Another factor in determining the optimal price for an item is that the demand curve for an item will change over time . Therefore, in one embodiment, the dynamic pricing system 102 does not base its price upon very old data. Still yet another obstacle the dynamic pricing system 102 faces in determining pricing for a particular item is that customer demand at the time periods in which a particular item is demanded varies depending on the nature of a particular item. For example, a hit song may have may sell a thousand copies a day. However, an obscure or old song to reach that level of sales may take a week, months, and/or even years. The profit (profit.sub.t) made in a particular time period (T) is described below in equation 2:

Detail Description Paragraph - DETX (55): [0099] With the above background, an example will now be used to describe how prices are dynamically adjusted according to one embodiment of the

present invention. In an initial time period (t=1), an initial price for an item is set. For example, the initial price of a song could be set to 90.cent. ($0.90), depending on whatever the content supplier and/or the administrator using administrative computer 104 believes is appropriate. In this particular example, P.sub.1=$0.90. In the second time period (t=2), the processor 110 of the dynamic pricing system 102 changes the price in order to get a sample of the change in client demand at a differing price levels. In the current example, the price of a particular song is raised by 10.cent., which is shown in equation 3 below.

Detail Description Paragraph - DETX (59): [0102] Flow diagram 2500 in FIG. 25 illustrates this technique according to one embodiment of the present invention. The technique described below will be for a song, but as should be understood this technique can be applied to the other types of media content items on the dynamic pricing system 102. In stage 2502, the initial price (p.sub.1) of a song for sale is set by the dynamic pricing system 102 and displayed to the customer device 124. One or more orders for the song are received by the dynamic pricing system 102 in stage 2504, and the dynamic pricing system 102 stores in memory 112 the price (p.sub.1) and quantity ordered (q.sub.1) for the first time period. The length of the time periods in this embodiment can for example be by second, by minute, hourly, daily, weekly, monthly, yearly, or some other time increment (i.e., every 33.5 seconds). In one form, the time interval for each period is one day. For instance, the first time period would be day 1, the second time period would be day 2 and the third time period would be day 3. After the first time period, the processor 110 of the dynamic pricing system 102 in stage 2506 sets a second price (p.sub.2) for the song and supplies the second price (p.sub.2) for the song to the customer devices 124 (see, Equation 3). The processor 110 in stage 2506 can either increase or decrease the price of the song. For explanation purposes, we will assume that the dynamic pricing system 102 increased the price in stage 2506. In stage 2508, the dynamic pricing system 102 receives a quantity of orders (q.sub.2) for the song from the customer devices 124. In time period three (t=3), the price and quantity ordered information from the previous two periods is used to determine whether the price change from the first period to the second period increased profits or not. If profits increased (q.sub.2 (p.sub.2-c)>q.sub.1 (p.sub.1-c)) then increasing prices further may be profitable. If profit decreases, however, then a price decrease from initial price (p.sub.1) may be appropriate. The changes in prices depend on the functional form of the particular demand curve for the particular content for sale. Using a logarithmic demand curve, Equation 4, which is shown below, can be used to calculate profit.

Detail Description Paragraph - DETX (68): [0107] It is assumed that the longer interval time between price changes, the smaller expected sampling error (.epsilon..sub.1, .epsilon..sub.2) would be relative to the quantities ordered. Over a long period of time, the expected sampling error terms would be zero. This yields equation 9 below. 2 = [Log [q 2] - Log [q 1]] (p 1 - p 2) (Equation 9)

Detail Description Paragraph - DETX (71): [0110] In order to prevent extreme fluctuations in pricing between two periods, the change in pricing between two different periods is dampened so that wild fluctuations in pricing does not occur. The amount of dampening can be adjusted depending on the amount of aggressiveness in pricing the content supplier and/or administrator intends to use. The estimation of .beta. is highly subject to sampling error. Therefore, to be

conservative, a geometric mean between the previous price and the new estimated optimal price is taken. In addition, absolute bounds on how much a price adjustment between two periods is further set to further dampen pricing. This is done just in case the estimation procedure gives an inaccurate estimate. A generic form of this technique used by the dynamic pricing system 102 is shown in Equation Set 11 below.

Detail Description Paragraph - DETX (77): [0115] Limit bounds (L) in Equation Set 11 is used to limit how much the price will be adjusted between two periods. For example, if the optimal price for the previous time period is greater than the limit bounds (L) from the actual price, then the dynamic pricing system 102 sets the price for the current time period (p.sub.t) to the limit bound (L) from the previous time period price (p.sub.t-1). Weighting factor (W) is used as a geometric mean of weighting the different prices between the optimal and the actual pricing. For example, the weighting factor is used when the optimal price for the previous time period (p.sub.t-1,opt) is within the limit bounds (L). The geometric mean of the weighting factor (W) allows the price to move in the direction of the estimated optimal price (p.sub.t-1,opt), but forces the price to move slowly. Aggressiveness in price adjustments can be adjusted by adjusting the weighting factor W. The more comfortable the administrator and/or content supplier are with the pricing estimates, the more aggressive the pricing can become by adjusting weighting factor W.

Detail Description Paragraph - DETX (78): [0116] For example, at time period one, the dynamic pricing system 102 priced the song at \$1.00 (p.sub.1=\$1.00) and the number of copies of the song that were purchased during time period one was 150 (q.sub.1=150). During time period two, the dynamic pricing system 102 priced the same song at \$1.40 (p.sub.2=\$1.40) and the number of copies of the song that were purchased during time period two was 100 (q.sub.2=100). In time period three, the dynamic pricing system 102 determines the optimal price to be the following in Equation 12 (stage 2510). In Equation 12, we have assumed the marginal cost of supplying an additional copy to be negligible, or zero (c=0) for this example. 4 p 2 , o p t = (1 + c) (p 1 - p 2) [Log [q 2] - Log [q 1]] p 2 , o p t = (1 + 0) (1.00 - 1.40) [Log [100] - Log [150]] = 0.99 (Equation 12)

Detail Description Paragraph - DETX (79): [0117] With the bounds equals \$0.50 (L) and weighting factor W=0.8 in this example, the dynamic pricing system 102 uses Equation Set 13 below in order to determine the dynamic price at time period three (p.sub.3).

Detail Description Paragraph - DETX (83): [0120] In stage 2510, the dynamic pricing system 102 with processor 110 sets the revised sale price for the item and stores the price in memory 110. Using the above example, the dynamic pricing system 102 would then set the price of the song to \$1.31 in time period three. For subsequent time periods, as more orders are received in stage 2508, the dynamic pricing system 102 continues to periodically re-price the content according to the Equation Set 11.

Detail Description Paragraph - DETX (86): [0122] In Equation 14, the price basis is modified by the dynamic price modifier so as to result in a new dynamic price for an item. In one form, the dynamic price modifier is some measure of change in demand for one or more items being priced.

In another form, the dynamic price modifier can take into account profitability of different price levels. It should be understood that the dynamic pricing modifier can take into account other factors. These factors can include, but are not limited to: the marginal and/or fixed costs of the item; price ceilings and/or floors for the item; file size of the item; the bandwidth of the connection to the dynamic pricing system 102; the quality of the item; the popularity of the item as measured by third parties, such as the Billboard ranking of a song; reviews of an item; and number of times an item has been viewed on the dynamic pricing system 102. Generally, the dynamic price modifier increases the price of an item when demand for that item increases and reduces the price of an item when the demand for the item decreases. In one form, the dynamic pricing modifier is based on the differences between the quantity ordered at specific intervals. For instance, these intervals can be by second, by minute, hourly, daily, monthly, or yearly. In another form, the dynamic pricing modifier is based on the time between successive purchases . For example, if the time delay between successive purchases decreases, the dynamic pricing system 102 can infer that demand is increasing and thus increase the price for the item.

Detail Description Paragraph - DETX (87): [0123] FIG. 26 is a flow diagram 2600 that illustrates a technique for dynamically pricing content items according to another embodiment of the present invention. In the technique illustrated in FIG. 26, the price of an item is changed based on the time delay between orders for the item. An initial price for the item for sale on the dynamic pricing system 102 is set in stage 2602. The content supplier and/or the system administrator can set the initial price initial price for the item. Alternatively or additionally, the dynamic pricing system 102 in this and other embodiments can automatically set the initial price based on default prices and/or historical prices for similar content stored in memory 112. In one form, the administrator through administrative computer 104 sets the initial price for content on the dynamic pricing system 102. In another form, the content supplier sets the initial price in stage 2602. In stage 2604, the processor 110 of the dynamic pricing system 102 receives a customer order over the network 106. From the clock 111, the processor 110 in stage 2606 stores in memory 112 the time the order was received, and the dynamic pricing system 102 processes the order . It should be appreciated that the time recorded from the clock 111 can be based on other events related to the order, such as when the content was actually delivered. In stage 2608, the processor 110 determines the time period (t) between the current purchase and the previous purchase of the item. In another form, the clock 111 is reset after each purchase such that the processor 110 stores in memory 112 the time period (t) between the current and previous purchases. Initially, at the first purchase of the item, the time period (t) between purchases can be based on the time delay between when the item was originally available on the dynamic pricing system 102 and when the first purchase was made. The time when the item was first available on the dynamic pricing system 102 can be stored into memory in stage 2602. In another form, the processor 110 waits to receive a second order from a customer before calculating the time delay (t) between purchases. It should be appreciated that the dynamic pricing system 102 can record a series of purchase times before dynamically pricing an item.

Detail Description Paragraph - DETX (93): [0129] Generally, when the current time delay is less than the average time delay, it can be inferred that demand for the item has increased. Conversely, if the current time delay is greater, then it can be inferred that demand has lowered. In stage 2612,

the processor 110 of the dynamic pricing system determines whether or not the current time delay between purchases (t) is less than average time delay between purchases (AVE(t)). If the current time delay is less than the average, the processor 110 increases the price of the item in stage 2614. In one form of the present invention, the price would be adjusted according to Equation 16 as illustrated below. As can be seen below, Equation 16 is derived from Equation 14. 6 P i + 1 = P i .times. A V E (t) t i (Equation 16)

Detail Description Paragraph - DETX (97): [0133] In Equation 16, the price basis is the price of the item for the latest period, and the dynamic price is the new price for the item. For example, if the price of the item was currently $1.20, the average time between purchases was 20 seconds and the current delay between purchases was 15 seconds, the new price for the item would be $1.60 (1.20.times.20.div.15=1.60). In another form of the present embodiment, the processor 110 takes into account of the upper price, or price ceiling, for the item. As previously mentioned, the content supplier, such as the artist, and/or the system administrator can specify upper and lower price limits for a particular item, such as a song. If, for example, the calculated new dynamic price exceeded the upper price limit, the processor 110 in stage 2614 would set the new price to the upper limit price. It should be appreciated that other factors, such as the ones mentioned above, can be factored in when adjusting the price in stage 2614. Potential customers can review the new, dynamic price 2404 in screen 2400 (FIG. 24A) and can decide whether to purchase the item at the new price 2404. When a customer decides to purchase the item at the increased price (after stage 2614), the processor 110 then proceeds to stage 2604 so as to process the next customer order.

Detail Description Paragraph - DETX (98): [0134] If the current time delay (t) between purchases is not less than the average time delay between purchases in stage 2612, then the processor 110 in stage 2616 determines whether the current time delay (t) between purchases is greater than the average time delay between purchases. If so, then it can be inferred that demand for the item has lowered, and the processor 110 in stage 2618 decreases the price of the item. In one form, the processor 110 reduces the price using Equation 16 (above). For example, if the price of the item was currently $1.20, the average time between purchases was 15 seconds and the current delay between purchases was 20 seconds, the new price for the item would be $0.90 (1.20.times.15.div.20=0.90). As should be appreciated, the processor 110 can consider other factors, such as the quality of the item, marginal cost and available bandwidth, when adjusting the price in stage 2618. For instance, in one form, the processor 110 also determines in stage 2618 whether the new price is less than the predefined lower price limit, or floor, for the item. If the new price is less than the lower price limit, then processor 110 only sets the new price at the lower limit. In another embodiment, to prevent wild fluctuations in price, the dynamic pricing system 102 in stages 2614 and 2618 can dampen the price changes between periods . When in stage 2616 the current time delay (t) between purchases is not greater than the average time delay between purchases, the processor in stage 2620 makes no price adjustment. In another embodiment, to prevent the price from being locked into a local maximum price, the processor 110 in stage 2620 randomly adjusts the price. After stages 2614, 2618 or 2620, customers can review the new price and place orders in stage 2604.

Detail Description Paragraph - DETX (99): [0135] A technique for dynamically pricing items according to another embodiment of the present invention will now be described with reference to flow chart 2700 in FIG. 27. In this technique, the databases 225 record the number purchases of each item in the dynamic pricing system 102. In one form of this embodiment, a dynamic pricing system 102 periodically updates the prices of each item for sale. The periodic update can be for every second, every minute, hourly, monthly, and/or yearly, to name a few time periods. In one form, the price of individual items is updated nightly. In another form, the prices are updated every minute. Each item for sale and/or type of item for sale, such a country songs, can be dynamically priced at different intervals and/or use different pricing techniques depending the nature of the item sold. For example, higher ticket items, which sell at a slower rate, may have their prices less frequently updated as compared to lower ticket items, which sell at higher volumes. Further, groups of items can be aggregately priced together.

Detail Description Paragraph - DETX (100): [0136] As mentioned above, a number of different people can set the initial price of an item. For instance, the artist, content supplier, owner of the item, and/or the system administrator can set the initial price for an item. In stage 2702, the dynamic pricing system 102 stores in memory 112 the initial price as the current best price for the item. The processor 110 in stage 2704 stores in memory 112 the number of sales of the item at the initial price for a specified time interval and the profit generated (best profit). In one form, the pricing and quantity information is updated daily in the tables 302 of the database 225. After the specified time interval, the processor 110 randomly changes the price within a range around the best price in stage 2706. In one form, the dynamic pricing system 102 randomly adjusts the current price within -5% to +5% of the best price. As should be understood, the price can be randomly adjusted within different ranges. In another form, the price is randomly adjusted without having specified upper and/or lower range limits. In stage 2708, the processor 110 records in memory 112 the quantity order (Q.sub.a) at the adjusted current price for the same time interval as in stage 2704 (for example, daily or every minute). The processor 110 in stage 2710 checks to see if the quantity ordered in the last time interval was greater than zero (0). If not, the processor 110 in stage 2712 reduces the current price. For example, the processor 110 can reduce the price by $0.10 increments when there are no sales of the item within the specified period. In another form, the price is lowered by a percentage of the current price, such as 10% of the current price. If the price reduction in stage 2712 would reduce the current price below the lower price limit, when specified, the process 110 sets the current price to the lower limit. As mentioned above, the lower limit may be based in part on the marginal and/or fixed costs for the item. After the price is reduced in stage 2712, the processor 110 in stage 2708 records the quantity sold at the new reduced price for the specified time interval. In an alternate form, the processor 110 in stage 2712 increases the time interval in which the quantity ordered is recorded in stage 2708. As should be appreciated, the processor 110 can both reduce the price and increase the time interval in stage 2712.

Detail Description Paragraph - DETX (106): [0142] In one embodiment of the dynamic pricing system 102, servlets perform the above-described functions in order to operate the dynamic pricing system 102. In one form, Java servlets are used. As should be appreciated the dynamic pricing system 102 can use other types of systems in order to operate. A block diagram 2800 showing the

relationship of servlets 2801 loaded on each of the navigation servers 204 is illustrated in FIG. 28. In diagram 2800, dashed arrows 2802 represent links between pages and solid arrows 2803 represent data flow. Main page servlet 2804 generates the anonymous main page 500 when the user is not logged into the dynamic pricing system 102 and the registered user main page 1000 when the user has logged onto the dynamic pricing system 102. Registration servlet 2805 handles user registration with the dynamic pricing system 102. As depicted, the registration servlet 2805 creates the registration form(s) 600. Once the user submits form 600, the registration servlet 2805 adds the new user to the user database 236 and logs in the new user automatically. Login servlet 2806 is responsible for logging in registered users into the dynamic pricing system 102. As shown, the login servlet 2806 includes an add session servlet 2808 which adds a new sessions to the session table 314 in the user database 236. For example, after the registration servlet 2805 registers a new user, the registration servlet 2805 automatically logs in the new user by calling the add new session servlet 2808. The login servlet 2806 generates the login form 900, and once the user submits a filled-out login form 900 to the navigation server 204, the login servlet 2806 checks to see if the usemame and password are valid by comparing the entered usemame and password with the user database 236. If the username and password are valid, the add new session servlet 2808 adds a new session to the session table 314 in the user database 236. After the user is logged into the dynamic pricing system 102, the login servlet 2806 returns control back to the servlet 2801 that originally called the login servlet 2806. Any page that requires the user to have a session will query the session table 314 in the user database 236 before the user is allowed to proceed. If the user does not have a current session, the login servlet 2806 is called so that the user can login to the dynamic pricing system 102.

Detail Description Paragraph - DETX (116): [0152] In each of the database servers 208, dynamic pricing servlet 3048 is used to dynamically price items in system 102. Servlet 3048 includes an initialization thread 3050, one or more pricing threads 3052, and one or more cleaning threads 3054. On startup of the database server 208, the initialization servlet 3050 retrieves the names of all of the pricing algorithms in field 336 for each item (arrow 3056) and starts a pricing thread 3052 for each pricing technique. As previously discussed, the dynamic pricing system 102 can use different techniques to price individual items and/or groups of items. For instance, country songs can be dynamically priced by a first pricing thread 3052 that uses the technique illustrated in FIG. 26; while jazz songs and mystery books can be dynamically priced by a second pricing thread 3052 that uses the technique illustrated in FIG. 27. In one form, as shown by arrow 3058, the pricing thread 3502 periodically updates at specified intervals the prices of items in fields 346 and 356 of the media table 304 and pricing table 306, respectively. After updating the pricing information in tables 304 and 306, the pricing thread 3502 then updates the pricing information in media cache 3016, as shown by arrow 3060. In one embodiment, the pricing thread 3052 updates the pricing information in tables 304 and 306 for all items that use the pricing thread 3052, and then updates the prices in cache 3016 for the items. In another embodiment, the pricing thread 3052 updates the pricing information in the media 304 and pricing 306 tables along with media cache 3016 individually for each item. The pricing threads 3052 can dynamically price items at different intervals, such as by minute, hourly, or daily. In one form, the pricing threads 3052 dynamically price items daily. When pricing thread 3052 uses the technique of dynamically pricing items based on time between purchases (FIG. 26), the pricing thread 3052 does not necessarily

have to update the price at a fixed interval. For example, the pricing thread can update the price of the item after the item is purchased or when a page containing the price for the item is generated.

Detail Description Paragraph - DETX (117): [0153] In FIG. 30, the cleaning thread 3054 periodically removes items with low demand from the media cache 3016, as shown by arrow 3062, and commits these items removed from cache 3016 to the media 304 and pricing 306 tables, as indicated by arrow 3064. For instance, when the demand for an item in the last dynamic pricing period was zero (0), the cleaning thread 3054 removes the information about the item, such as the media ID, price and demand, from the media cache 3016 and commits this information to tables 304 and 306. It should be understood that the dynamic pricing system 102 can include a single cleaning thread 3054, multiple cleaning threads 3054 or no cleaning threads 3054 at all. For example, no cleaning threads 3054 are needed, when cache is not used. In one form, the cleaning thread 3054 operates periodically in conjunction with a corresponding pricing thread 3052. For example, each pricing thread 3052 can have a corresponding cleaning thread 3054 that runs either before or after the pricing thread 3052 dynamically prices items. In another form, the cleaning thread 3054 periodically operates at a different time interval as compared to the corresponding pricing thread 3052.

Detail Description Paragraph - DETX (122): [0158] In stage 3106, the dynamic pricing system 102 tracks the purchases of the work, and the dynamic pricing system 102 stores the price and quantity demand for the item in the database servers 208. In stage 3108, the content supplier of the work is compensated for the work. The owner of the dynamic pricing system 102 generates revenue by receiving a portion of the revenue generated by the sale of items on the dynamic pricing system 102. In one embodiment, the content supplier is paid a percentage of the profit generated from the sales of the work on the dynamic pricing system 102. In another embodiment, the content supplier is paid a fixed fee for each time the work is purchased, and in a further embodiment, the content supplier can be paid a flat fee for the work. The compensation can be sent to the content supplier in a number of manners. For example, each time the work is sold, the account balance 390 for the content provider can be credited. The content supplier can also have the money credited to a deposit account each time the work is purchased. Alternatively, the dynamic pricing system 102 can periodically send a check to the content supplier for the amount the work earned during the last period. In another arrangement, the third party payment system 136, such as PayPal.com, supplies the payment to the content supplier. It should be understood that other types of compensation arrangements can be made.

Detail Description Paragraph - DETX (123): [0159] As discussed above, institutions such as colleges and universities have blocked file swapping services from their networks 115 because the large volumes of downloads from such systems clog their networks 115. With the high loads created by the file swapping services, institutions bear significant costs and yet receive no benefit from the file swapping services. A technique for providing institutions incentives to allow their members access the dynamic pricing system 102 will now be described with reference to flowchart 3400 in FIG. 34. With this technique, since institutions benefit when their members to use the dynamic pricing system 102, the institutions will be more inclined to not block access to the

dynamic pricing system 102. In stage 3402, a representative of the institution, which operates network 115, registers with the dynamic pricing system. During the registration stage 3402, the representative provides the name of the institution along with other information about the institution to the dynamic pricing system 102. The representative can register the institution directly with the dynamic pricing system 102 by filling out an online form. Alternatively, the representative can contact and supply the information to the system administrator, and the system administrator can then enter the information into the dynamic pricing system 102. In another embodiment, institutional registration is optional such that an institution does not need to register in order to receive compensation. For example, the institutional network 115 can be automatically identified by the IP address of the user, and the compensation can be forwarded to the institution and/or the institution contacted about the compensation without requiring any registration by the institution. The representative in stage 3402 further indicates how members of the institution can be identified. These institutional member identifiers can include, but are not limited to, the IP addresses of the institutional devices 125, the IP address of a firewall for the institutional network 115, a client identifier such as a "cookie", and the domain name for the institution. In one form, the domain name for email accounts on the institutional network 115 is used to identify institutional members like college students. Moreover, in stage 3402, the representative can specify how any revenue generated by the institution on the dynamic pricing system 102 is to be paid. For example, a university can designate a particular scholarship that will receive the funds from the dynamic pricing system 102. After the institutional information is submitted, the dynamic pricing system 102 stores the information (all or part) in the database servers 208. In one form, the dynamic pricing system 102 creates a user account for the institution and records the institutional information in the user account. In another form, the institutional information is maintained in one or more separate database tables 302.

Detail Description Paragraph - DETX (124): [0160] In stage 3404, the dynamic pricing system 102 receives a purchase request from a customer, and in stage 3406, the processor 110 of the dynamic pricing system 102 determines whether the customer is a member of one of the registered institutions. In one embodiment, system 102 compares the domain name in the email address field 386 of the customer in account table 312 with the domain name supplied by the institution in order to determine if the customer is a member of the institution. For example, if a college specified that its students have the "college.edu" domain name in their email addresses, then any student that entered an email address with the "college.edu" in the email address field 624 of form 600 (FIG. 6), such as "jsmith@college.edu", would be identified as a member of that college. In another embodiment, system 102 compares the IP address, or some other addressing scheme, of the customer device 124 with the IP addresses (or other address) given by the institution in order to determine if the customer is a member of the institution. If the customer is a member of the institution, the dynamic processing system 102 in stage 3408 credits the account of the institution and in stage 3410 processes the order from the customer. If in stage 3406 the customer is not an institutional member, then system 102 proceeds to stage 3410 in order to process the order. After processing the order in stage 3410, the dynamic pricing system is able to receive other orders in stage 3404. As should be appreciated, the stages in flow chart 3400 can be performed in a different sequence than is shown. For example, the order can be processed and fulfilled in stage 3410 before the dynamic system 102 determines whether or not the customer is an institutional member

in stage 3406. In another embodiment, the dynamic pricing system 102 periodically (such as monthly) reviews the purchases of customers that have been identified as institutional members and credits the account of the institutions based on the purchases of their members.

Detail Description Paragraph - DETX (125): [0161] The money accumulated in the institution account can be disbursed at set intervals, at variable intervals, when a specific amount is accumulated, after every purchase by a member, when a specified traffic level is reached and/or in other manners as specified by the institution. As should be appreciated, the payments can be made in the same manners as described above for the content suppliers. For instance, one or more scholarships, which were designated by the university, can receive a monthly check from the dynamic pricing system 102 for the last month's account balance. By directly and/or indirectly receiving compensation from the dynamic pricing system 102, institutions that run institutional networks 115 are provided with an incentive to allow their members to access the dynamic pricing system 102. In one form, five-percent (5%) of sales are rewarded to the institution, and in another form, the institution is rewarded $0.005 (1/2 cent) from each sale. As should be understood other types of compensation packages and/or amounts can be used. It should be appreciated that the above technique can be applied to other types of institutions, besides learning institutions, that experience problems with high network traffic, such as charitable organizations and corporations.

Claims Text - CLTX (59): 58. An apparatus, comprising: memory containing at least one item; a processor operatively coupled to said memory and responsive to input over a network from one or more clients, said processor being operable to dynamically adjust pricing of the item, said processor being operable to deliver the item from memory to the clients that order the item at a dynamically adjusted price .

Claims Text - CLTX (85): 84. The apparatus of claim 82, further comprising: one or more supplier devices operatively coupled to said dynamic pricing system over the network ; and wherein at least one of said file servers includes at least one of said supplier devices.